

AMENDMENTS TO THE CLAIMS:

Claims 11-20 are added. The following is the status of the claims of the above-captioned application, as amended.

Claim 1. (Original.) A process for preparing a dough-based product, comprising adding a xylanase to a dough, leavening, and heating the dough, wherein the xylanase is a polypeptide having at least 83 % identity to the amino acid sequence as shown in positions 1-182 of SEQ ID NO 2 or encoded by a nucleic acid sequence which hybridizes at 38°C in 0.1 x SSC with the complementary strand of nucleotides 85-630 of SEQ ID NO: 1.

Claim 2. (Original.) The process of claim 1 which further comprises adding an exo-acting maltogenic alpha-amylase to the dough.

Claim 3. (Original.) A composition which comprises flour together with a xylanase which is a polypeptide having at least 83 % identity to the amino acid sequence as shown in positions 1-182 of SEQ ID NO: 2 or encoded by a DNA sequence which can hybridize at 38°C in 0.1 x SSC to the complementary strand of nucleotides 85-630 of SEQ ID NO: 1.

Claim 4. (Original.) The composition of claim 3 which is a dough.

Claim 5. (Original.) A granulate or agglomerated powder comprising a xylanase which is a polypeptide having at least 83 % identity to the amino acid sequence as shown in positions 1-182 of SEQ ID NO 2 or encoded by a nucleic acid sequence which hybridizes at 38°C in 0.1 x SSC with the complementary strand of nucleotides 85-630 of SEQ ID NO: 1.

Claim 6. (Original.) A polypeptide having xylanase activity selected from the group consisting of:

a) a polypeptide encoded by the xylanase-encoding part of the genome present in *Paenibacillus* DSM 16232 that can be amplified with the primers (SEQ ID NO.: 3) and (SEQ ID NO.: 4)

b) a polypeptide having an amino acid sequence as shown in positions 1-182 of SEQ ID NO 2;

c) a polypeptide which has at least 95 % identity to the polypeptide defined in (a) or (b),

d) a polypeptide which is encoded by a nucleic acid sequence which hybridizes at 49°C in 0.1 x SSC with the complementary strand of nucleotides 85-630 of SEQ ID NO: 1.

Claim 7. (Original.) A polynucleotide comprising a sequence selected from the group consisting of:

- e) the xylanase-encoding part of the genome of *Paenibacillus* that can be amplified with the primers (SEQ ID NO.: 3) and (SEQ ID NO.: 4) present in DSM 16232;
- f) nucleotides 85-630 of SEQ ID NO: 1;
- g) a polynucleotide encoding amino acids 1-182 of SEQ ID NO 2;
- h) a polynucleotide which encodes a polypeptide having xylanase activity and has at least 95 % identity to the polynucleotide of a), b) or c),
- i) a nucleic acid sequence which hybridizes at 49°C in 0.1 x SSC with the complementary strand of the polynucleotide of a), b) or c),
- j) the complementary strand of the polynucleotide of a), b), c), d) or e).

Claim 8. (Original.) A vector comprising the polynucleotide of claim 7 operably linked to one or more control sequences that direct the production of the polypeptide in a suitable host.

Claim 9. (Original.) A transformed host cell comprising the vector of claim 8.

Claim 10. (Original.) A method for producing an xylanase, which comprises

- k) cultivating the host cell of claim 9 under conditions appropriate for expression of xylanase, and
- l) recovering the xylanase.

Claim 11. (New.) The process of claim 1, wherein the xylanase is a polypeptide having at least 83 % identity to the amino acid sequence as shown in positions 1-182 of SEQ ID NO 2.

Claim 12. (New.) The process of claim 1, wherein the xylanase is a polypeptide having at least 85 % identity to the amino acid sequence as shown in positions 1-182 of SEQ ID NO 2.

Claim 13. (New.) The process of claim 1, wherein the xylanase is a polypeptide having at least 90 % identity to the amino acid sequence as shown in positions 1-182 of SEQ ID NO 2.

Claim 14. (New.) The process of claim 1, wherein the xylanase is a polypeptide having at least 95 % identity to the amino acid sequence as shown in positions 1-182 of SEQ ID NO 2.

Claim 15. (New.) The process of claim 1, wherein the xylanase is a polypeptide having at least 98 % identity to the amino acid sequence as shown in positions 1-182 of SEQ ID NO 2.

Claim 16. (New.) The process of claim 1, wherein the xylanase is a polypeptide encoded by a nucleic acid sequence which hybridizes at 38°C in 0.1 x SSC with the complementary strand of nucleotides 85-630 of SEQ ID NO: 1.

Claim 17. (New.) The process of claim 1, wherein the xylanase is a polypeptide encoded by a nucleic acid sequence which hybridizes at 40°C in 0.1 x SSC with the complementary strand of nucleotides 85-630 of SEQ ID NO: 1.

Claim 18. (New.) The process of claim 1, wherein the xylanase is a polypeptide encoded by a nucleic acid sequence which hybridizes at 45°C in 0.1 x SSC with the complementary strand of nucleotides 85-630 of SEQ ID NO: 1.

Claim 19. (New.) The process of claim 1, wherein the xylanase is a polypeptide encoded by a nucleic acid sequence which hybridizes at 49°C in 0.1 x SSC with the complementary strand of nucleotides 85-630 of SEQ ID NO: 1.

Claim 20. (New.) The process of claim 1, wherein the xylanase is a polypeptide encoded by a nucleic acid sequence which hybridizes at 55°C in 0.1 x SSC with the complementary strand of nucleotides 85-630 of SEQ ID NO: 1.